Dart Aerospace Ltd. Tuesday, 12/5/2006 8:19:50 AM Date Kim Johnston User: **Process Sheet** : BRACKET ASSEMBLY **Drawing Name** : CU-DAR001 Dart Helicopters Services Customer Job Number : 10278 **Estimate Number** : D3121141 : NA **Part Number** P.O. Number S.O. No. : 1/10 : D3121 REV D **Drawing Number** : 12/5/2006 This Issue Project Number : N/A Prsht Rev. : MACHINED PARTS **Drawing Revision** Type First Issue : 29397 Material **Previous Run** : 1/5/2007 30 Um: Each **Due Date** Qty: Written By Checked & Approved By New issue KJ/DS : Est Rev:Pick:A 04.02.18 Comment **Additional Product** Job Number: Description: Seq. #: Machine Or Operation: M174B1000X02000 17-4 SS Bar 1.0 Comment: Qty.: 0.5775 f(s)/Unit Total: 17.3250 f(s) Material: 17-4 SS Bar per AMS 5604/5643 (M17-4-B1.000x02.000) Identify for D3121-111 Batch: 1973 BAND SAW BAND SAW 2.0 Comment: BAND SAW 30 Cut blanks: (1.000" x 2.000") 6.600" long 3.0 HAAS1 Comment: HAAS CNC VERTICAL MACHINING #1 1-Machine D3121-111 as per Folio FA361 and Dwg D3121Identify as D3121-111

2-Deburr

3-Scribe batch number

INSPECT PARTS AS THEY COME OFF MACHIN

30

QC2

INSPECT PARTS AS THE COME OF MACHIN



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

07/01/10

30

4.0

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W/O:		CHANGES	. · ·				
DATE	STEP	PROCEDURE CHANGE	By Date Qty Approval Chief Eng / Prod Mgr	Approval QC Inspector			
	:						

Part No:	PAR #: Fault Category:	NCR: Yes No DQA:	Date: 07640
	÷	QA: N/C Closed:	Date:
ICR:	WORK ORDER NON-	CONFORMANCE (NCR)	
	Corrective	Action Section B	

NCR:									
DATE	STEP	Description of NC Section A	Initial				Approval Chief Eng	Approval QC Inspecto	
64.01.10	3.6	-tool des counterbose broke while machining	Chief Eng CAPA	- Change tool - Scrap + destroy - Replace	5A 04.01.10	07/01/10	Par	orlol10	

NOTE: Date & initial all entries

Tuesday, 12/5/2006 8:19:50 AM Date: User: Kim Johnston **Process Sheet Drawing Name: BRACKET ASSEMBLY** Customer: CU-DAR001 Dart Helicopters Services Part Number: D3121141 Job Number: 29816 Job Number: Seq. #: Description: **Machine Or Operation:** SECOND CHECK 5.0 QC8 Comment: SECOND CHECK ٠, D312121 1.0000 Each(s)/Unit Total: 30.0000 Each(s) Comment: Qty.: Description Batch **Qty Part Number** Bolt 1329828 1 D3121-21 07/01/12 D3121241 Bearing Assembly 7.0 Comment: Qty.: 1.0000 Each(s)/Unit 30.0000 Each(s) Total: B30242×7 Pick: Description Batch ろようをょう x23 **Qty Part Number** 107/01/12 1 D3121-241 Bearing Ass SMALL & MEDIUM FAB RESOURCE 1 8.0 Comment: SMALL & MEDIUM FAB RESOURCE 1 Assemble D3121-141 as per Dwg D3121. INSPECT WORK TO CURRENT STEF QC5 9.0 Comment: INSPECT WORK TO CURRENT STEP 39 10.0 PACKAGING PACKAGING RESOURCE #1 Comment: PACKAGING RESOURCE #1 Identify and Stock Location: <u>51 40</u>8 11.0 QC21 Comment: FINAL INSPECTION/W/O RELEASE (207/01/15 Job Completion

Form: rprocess

Page 2

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
•							
Part No	:	PAR #: Fault Category:	NCR: Yes	No DQ	A:	Date:	

QA: N/C Closed: ____ Date: ____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
		Description of NC		Corrective Action Section B		Verification		Approval	
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspecto	
···									

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	29816
Description: Bracket	Part Number:	D3121-111
Inspection Dwg: D3121 Rev: D		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototyp

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.392	+0.002/-0.000	\$0.3931				
0.75	+/-0.030	0.752				
0.375	+/-0.010	2200				
2.14	+/-0.030	2.133			-	
0.950	+/-0.010	0,950				
0.600	+/-0.010	0.605				
1.96	+/-0.030	1.965				
0.280	+/-0.010	0.277		.,,		
3.330	+/-0.010	3.320				
3.630	+/-0.010	3/1/				
R0.25	+/-0.030	3.626				
R0.375	+/-0.010	20.250 R0.375				
Ø0.201	+0.005/-0.000					
0.100	+/-0.010	0.098				
0.100	+7-0.010	0.098				
6.18	+/-0.030	6.175				
5.89	+/-0.030	5.890				
0.080	+/-0.010	0,080				
0.300	+/-0.010	0.299				
30°	+/-0.1°	30°				
R0.25	+/-0.030	R0.250			'	
0.130	+/-0.010	0.129	~			
0.004	. / 0.040					
0.381	+/-0.010	0.384				
0.281-0.26		0.201				
0.400	+/-0.010	0.396			· ·	
0.580	+/-0.010	0,585				
100°	+/-0.1°	1000				
20.320.032	+/-0.010	0.030				

Measured by: Audited by: The Prototype Approval: N/A

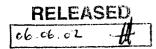
Date: 07/01/08 Date: 04/01/08 Date: N/A

Rev	Date	Change	Revised by	Approved
Α	04.01.12	New Issue P/O D3121-141	KJ/RF	
В	04.05.05	Dimensions changed/re-arranged per Dwg revision	KJ/JLM LA	21
С	06.06.14	Dwg Rev. updated	KJ/JLM	





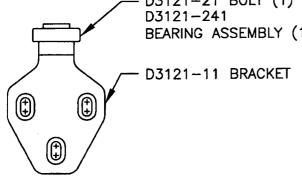
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	N.Ah		D3121 SHEET 1 OF 10
DA	TE.	<u> </u>	TITLE SCALE
06	6.05.17		BRACKET ASSEMBLY 1:2
A		02.04.15	NEW ISSUE
E	3	03.01.16	ADD RIDGES; ADD MAT'L PROP; FIX P/N ADD -141/-143/-144/-145/-146
C	;	04.02.17	ADD CLEARANCE; USE -241 BEARING
)	06.05.17	D3121-25 CAP WAS 1.024, NOW 1.000



D3121-21 BOLT (1) BEARING ASSEMBLY (1)

D3121-041 BRACKET ASSEMBLY

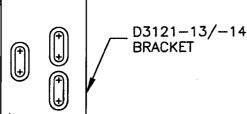
(REPLACES PREMIER P/N B30-23000-33)



D3121-21 BOLT (1) D3121-241 BEARING ASSEMBLY (1) (2 PLACES)

D3121-043 (SHOWN) / D3121-044 (OPPOSITE) BRACKET ASSEMBLY

(REPLACES PREMIER P/N B30-23000-37/-38)



D3121-21 BOLT (1) D3121-241 BEARING ASSEMBLY (1) (2 PLACES)

D3121-15/-16 BRACKET

D3121-045 (SHOWN) / D3121-046 (OPPOSITE) BRACKET ASSEMBLY

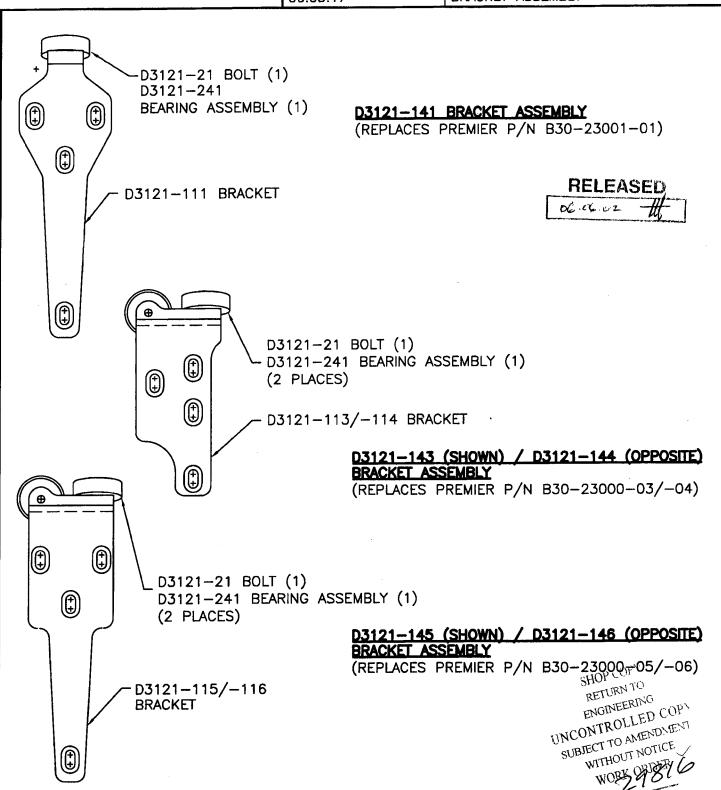
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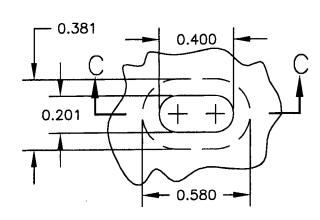
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į	DATE		TITLE		SC	ALE
ı	06.05.17		BRACKET	ASSEMBLY		1:2

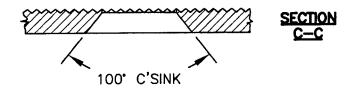




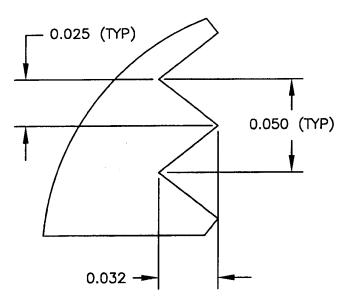
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06.05.17		BRACKET ASSEMBLY	1:1	





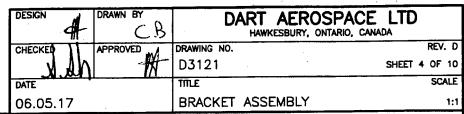


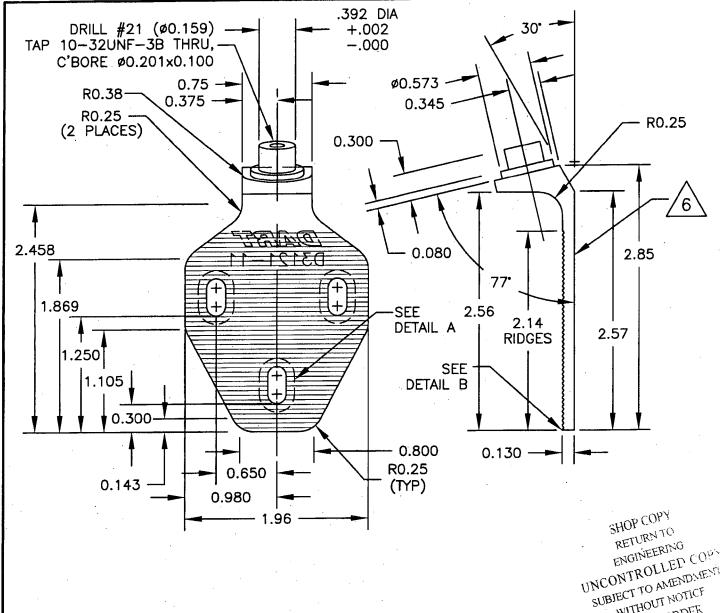
<u>DETAIL B:</u> RIDGE DETAIL PARTIAL SECTION **SCALE 1:20**



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D3121-11 BRACKET

1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B) MIN ULTIMATE TENSILE = 150 ksi MIN YIELD TENSILE = 100 ksi

- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

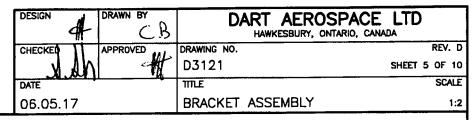
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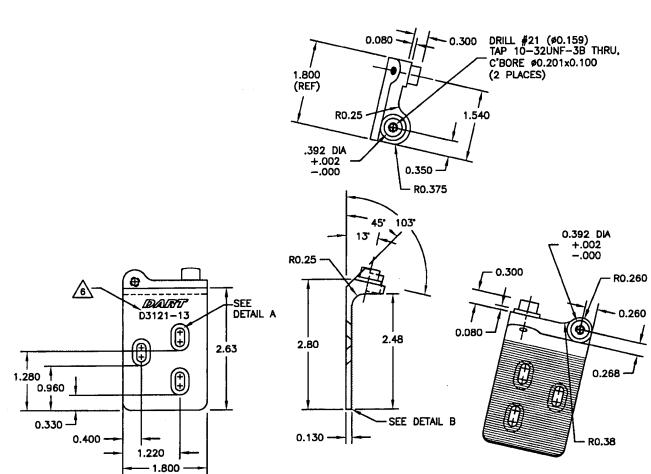
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D3121-13 BRACKET (SHOWN) D3121-14 BRACKET (OPPOSITE)

1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi

- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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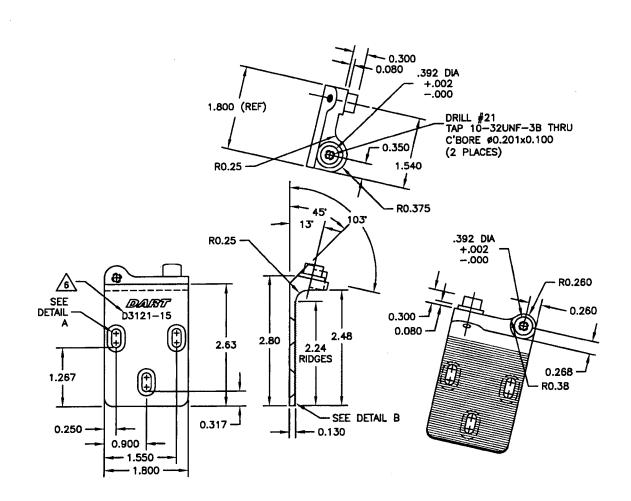
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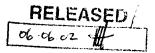
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06.05.1	7		BRACKET ASSEMBLY	1:2



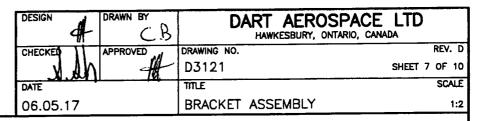
1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B) UNCONTROLLED COPY
MIN ULTIMATE TENSILE = 150 ksi MIN YIELD TENSILE = 100 ksi

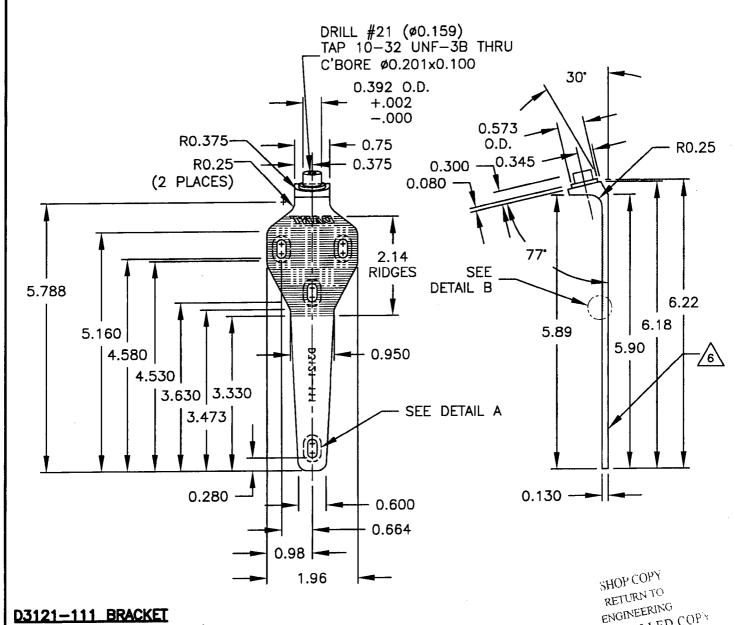
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N AND LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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D3121-111 BRACKET

2) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B) INCONTROLLED COPY MIN ULTIMATE TENSILE = 150 kgi

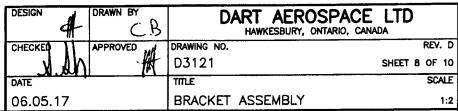
MIN YIELD TENSILE = 100 ksi

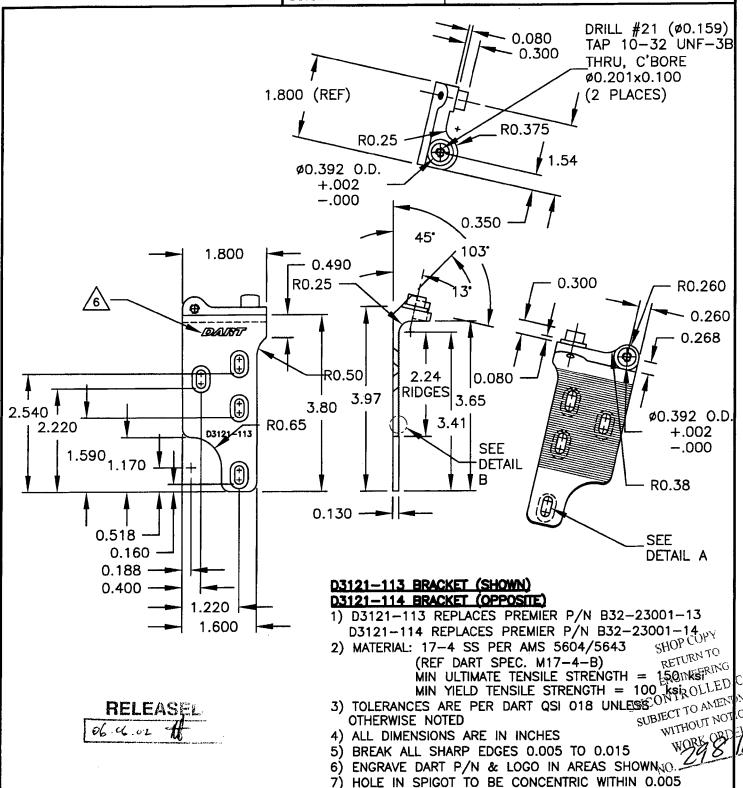
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHEWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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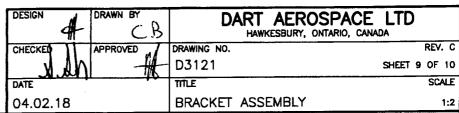


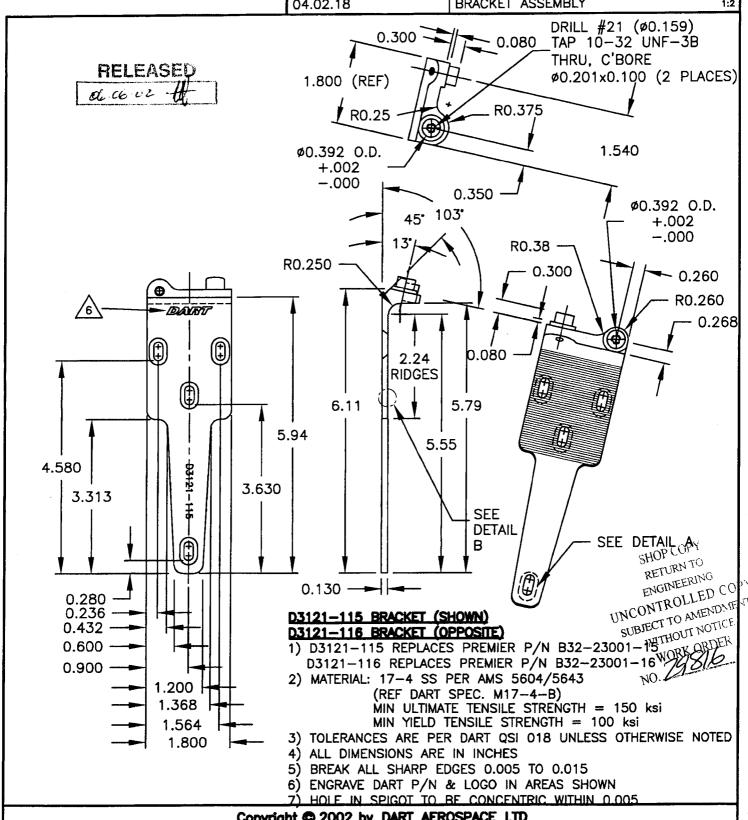




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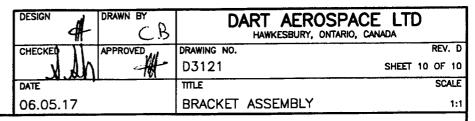


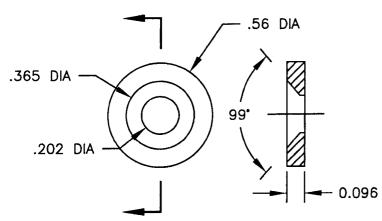




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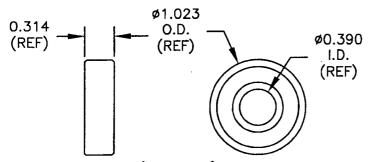






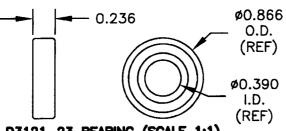
D3121-17 WASHER (SCALE 2:1)

- 1) REPLACES PREMIER P/N B32-23001-17
- 2) MATERIAL: AISI 303 SS ROUND BAR, ANNEALED (REF DART SPEC. M303R)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015



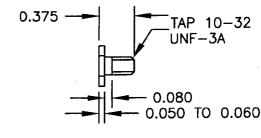
D3121-19 BEARING (SCALE 1:1)

- 1) POSSIBLE SUPPLIER: KING BEARING P/N 6000-2ZJ/EM FAFNIR P/N 9100KDD
- 2) ALL DIMENSIONS ARE IN INCHES



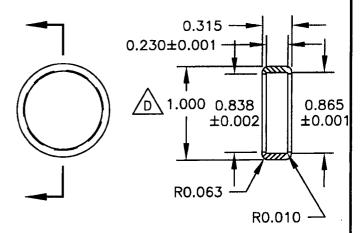
D3121-23 BEARING (SCALE 1:1)

- 1) POSSIBLE SUPPLIER: SKF P/N 61900-2Z OR KML P/N 6900-ZZ
- IN INCHES ALL DIMENSIONS ARE



D3121-21 BOLT (SCALE 1:1)

- 1) MATERIAL: AISI 303 SS HEX, ANNEALED (REF DART SPEC. M303H0.500)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015



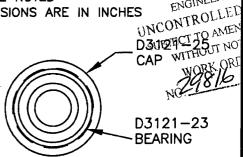
D3121-25 CAP (SCALE 1:1)

- 1) MATERIAL: DELRIN ROD, Ø1.25
 - (REF DART SPEC. M-DELRIN-R机250)

 CO_{bA}

DIVENT

- 2) TOLERANCES ARE PER DART QSI 018 LINESS ENGINEERING OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES



D3121-241 BEARING ASSEBLY (SCALE 1:1)

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